

## Information Sheet

Order No.  
Ma-Ru Holding Company, Inc.  
Bonzi Sanitation Landfill  
for Operation, Closure and Corrective Action  
at the Bonzi Sanitation Landfill, Stanislaus County

### **FACILITY DESCRIPTION**

Ma-Ru Holding Company, Inc. and Bonzi Sanitation Landfill, Inc. Partnership (hereafter jointly referred to as "Discharger") own and operate the Bonzi Sanitation Landfill (Bonzi Landfill), in Modesto California. The facility is on a 128-acre parcel that is three miles southwest of Modesto near the Tuolumne River. The facility currently is regulated by Waste Discharge Requirements (WDRs) Order No 98-093 in conformance with California Code of Regulations Title 27, Division 2, Subdivision 1 (hereafter Title 27). In addition, WDRs Order No 90-215 regulates the land application area. Both of these WDRs will be rescinded with the adoption of this Order. These WDRs prescribe requirements for current landfilling, post closure maintenance of the closed unit, closure of Waste Management Unit (WMU) II and III, environmental monitoring and the corrective action program. The facility is also regulated under Cleanup and Abatement Order No. 89-185 which will also be rescinded with the adoption of this Order.

The majority of the landfill is not constructed to today's standards, and portions of the wastes are in contact with the shallow groundwater. None of the four waste management units were constructed with a bottom liner or a leachate collection and recovery system, as is required of modern landfills. The landfill has created a plume of groundwater pollution, which must be contained and treated through a groundwater extraction and treatment system. In 2005, the Discharger reported they received 10,398 tons of material.

### **Site History**

In 1984, the Discharger reported that its activities had resulted in a release of volatile organic compounds to groundwater. The Regional Board subsequently adopted Cease and Desist (CDO) Order No. 84-153, which directed the Discharger to evaluate the extent of the contaminant plume. Upon completion of that task, the Regional Board adopted Cleanup and Abatement Order No. 89-185, requiring the installation and operation of a groundwater remediation system. While the Discharger installed a groundwater extraction and treatment system, the Discharger failed to operate it for at least one year, from March 2004 through March 2005. In addition, the system is not adequate to contain the contaminant plume or lower the groundwater table enough to prevent groundwater from contacting the waste at the bottom of the landfill. As evidenced by 17 Notice of Violations issued since January 2001, the Discharger until recently (since early 2006) has had a long history of failing to address noncompliance issues, failing to operate its groundwater extraction system, and failing to submit adequate reports.

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## **Cease and Desist Order**

After site inspections in March and April 2005, staff prepared a Cease and Desist Order to address the numerous regulatory violations. Among other items, the CDO Order includes a schedule for the Discharger to: stop accepting non-permitted waste, repair the soil cover on the closed unit, repair the storm water conveyance system, complete final closure for the two inactive units, evaluate the adequacy of the groundwater detection and corrective action systems, establish a financial assurance fund, and continuously operate the groundwater extraction and treatment system. After many meetings and revisions by staff, the Discharger elected to accept the terms of the proposed CDO. The Regional Water Board at its 29 April 2005 Board meeting adopted as an uncontested item Order No. R5-2005-0073.

## **Stipulated Judgment**

Following the adoption of Cease and Desist Order No. R5-2005-0073, the Discharger began submitting the required reports. However, staff's review found that these submittals were incomplete and did not address the requirements of the CDO nor the applicable landfill regulations. Although the operator complied with a few aspects of the CDO, it did not comply with the majority of the requirements, as evidenced by the seven Notices of Violation that were issued since the Order was adopted.

In September 2005, the Stanislaus County District Attorney and Regional Board staff began a joint enforcement action against the landfill. The District Attorney's complaint alleged that the Discharger has failed to comply with numerous requirements of the CDO, including failing to demonstrate that the groundwater detection and extraction system is adequate for site conditions, and failing to post financial assurances for corrective action, closure and post closure maintenance activities at the landfill. In addition, the Discharger has failed to provide at least one-foot of interim soil cover on two of the landfill units and has allowed un-permitted waste to be deposited in the active unit. The parties agreed to a Stipulated Judgment, which was filed with the Superior Court of Stanislaus County on 23 December 2005. Terms of the stipulated judgment include:

- Payment of \$450,000 to the Stanislaus County District Attorney's Office and the State of California over a two year period;
- Payment of \$100,000 if the Discharger submits fraudulent reports at any time in the next three years; and
- Payment of \$1.4 million in penalties has been stayed contingent upon Discharger's satisfactory completion of 21 studies and improvements to the landfill.

These tasks must be completed by the timelines described in the judgment or the Discharger must pay the specific penalty associated with each task. The stipulated judgment does not

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relieve the landfill owners and operators from the need to comply with all aspects of their WDRs and the CDO Order, nor does it prohibit the Regional Board from taking additional enforcement actions for items not addressed in the judgment.

### **Cleanup and Abatement Order**

In August 2006, the Executive Officer signed Cleanup and Abatement Order No. R5-2006-0172 that required preparation of a revised closure plan for WMU II, III, and IV; to define the extent of the groundwater pollution; to re-evaluate the design and capabilities of their groundwater treatment system; and upgrade the groundwater monitoring system.

### **DESCRIPTION OF ORDER**

As a result of Cease and Desist Order No. R5-2005-0073, the 23 December 2005 Stipulated Judgment, and Cleanup and Abatement Order No. R5-2006-0172, the Discharger has submitted a Joint Technical Document to update the facilities operations, Closure and Post Closure Plans for WMUs II, III and IV, a groundwater monitoring system upgrade report, and the 5-year groundwater sampling event data. These WDRs include an update of the general site conditions, as well as requirements for the groundwater Corrective Action Program, the groundwater-monitoring program, the post closure maintenance of Waste Management Unit I, and the closure design of Waste Management Units II and III.

**Groundwater Corrective Action Program** - On 1 October 1984, the Discharger submitted a report titled *Groundwater Study, Bonzi Landfill*. This report disclosed that in the winters of 1981-1982 and 1982-1983 the groundwater rose and percolated through the landfilled refuse, and that volatile organic compounds (VOCs), elevated levels of metals and total dissolved solids have been detected in the downgradient monitoring wells. Following the confirmed release, Cease and Desist Order No 84-153 directed the discharger to evaluate the extent of the contaminant plume. As a result of the Order, and the subsequent data evaluation, the Board adopted Cleanup and Abatement Order No. 89-185 to implement the necessary groundwater remediation. Since the adoption of Cleanup and Abatement Order No. 89-185, the Discharger has installed the required remediation system, yet the monitoring data has consistently shown that the system is not functioning as planned. At this time, VOCs continue to be reported by the Discharger downgradient from the WMU I point of compliance, and in off-site wells. The continued pollution of groundwater may be attributed to the non-operation of the groundwater remediation system. The discharger informed Board staff during an April 2005 inspection that the system has not been operational for over a year.

This Order requires the Discharger to maintain a corrective action monitoring system, in compliance with Title 27 Section 20415(b)(1)(D) to evaluate the continuous operational performance of their corrective action remediation systems. The performance standards for

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their corrective action system are listed in Cleanup and Abatement Order No. R5-2006-0721, and include the following:

- *Capture all groundwater contaminates from Bonzi Landfill at the point of compliance. After the Discharger has made a reasonable attempt to capture all groundwater contaminates and if the Discharger believes it is technically or economically infeasible to achieve this criteria, then the Discharger must provide a report to Regional Water Board demonstrating their conclusion. If the Regional Water Board does not concur with the report's conclusion, the Discharger must make further attempts to comply with the criteria.*
- *Prevent groundwater from inundating the bottom of the four waste management units. After the Discharger has made a reasonable attempt to prevent groundwater from inundating the bottom of the waste management units and if the Discharger believes it is technically or economically infeasible to achieve this criteria, then the Discharger must provide a report to Regional Water Board demonstrating their conclusion. If the Regional Water Board does not concur with the report's conclusion, the Discharger must make further attempts to comply with the criteria.*
- *Clean-up groundwater to background or a concentration limit greater than background (CLGBC) in compliance with Section 20400(c) CCR Title 27. This includes the entire groundwater plume as described in Section 20430(c) CCR Title 27.*
- *Be able to monitor the groundwater and leachate levels from three locations within the footprint of each landfill unit.*
- *Remove any leachate generated from with the unit.*
- *Continuous treatment system (24 hours a day, 365-days a year) operation until the groundwater plume is remediated to background or a concentration limit greater than background (CLGBC) in compliance with Section 20400(c) CCR Title 27.*
- *Corrective action monitoring program that meets the requirements in Section 20430(d) CCR Title 27.*

**Land Application Area (Corrective Action Program)** – In an effort to better manage the wastewater generated from the groundwater extraction system, the Discharger has proposed to discharge treated water to a land application field. This water will be stripped of all volatile organic compounds, but it will still have elevated total dissolved solids. The 10-acres land application area is in the southwestern portion of the property. Poplar trees will be planted for the evapotranspiration of the applied water.

**Groundwater Monitoring Program** – As a requirement of the Stipulated Judgment the Discharger was to upgrade their groundwater monitoring system to comply with the Standards outlined in Title 27.

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This Order identifies the new wells that were installed to replace wells that were no longer serving their monitoring purpose. It also requires the Discharger to recalculate the landfills water quality protection standards. The current water standards include only barium, iron, chloride, nitrate-n and total dissolved solids. This Order requires the Discharger to also establish standards for magnesium.

The Discharger will also be required to install monitoring wells adjacent to the new land application area to monitor any changes in groundwater quality.

**Post Closure Maintenance of Waste Management Unit I** – Closure of Waste Management Unit I was completed in January 1999. The WDRs require that the Discharger maintain the integrity of the cap. On 16 October 2003, the Discharge was sent a Notice of Violation for inadequate post closure maintenance for WMU I. These violations caused the cover system to no longer comply with the performance standard in Title 27. These violations included: the runoff/run-on ditches were choked with vegetation; the cover was not maintained to prevent ponding, and the surveyed monuments could not be located.

This Order requires that the Discharger to maintain WMU I's cover in compliance with Title 27.

**Closure of Waste Management Units II, III, and IV** – Cleanup and Abatement Order No. R5-2006-0721 requires that WMUs II, III, and IV be closed no later than **31 December 2011**. The Discharger has proposed an engineered alternative cover system, which is consistent with the performance goal of the landfill cover prescriptive standard in Title 27. This alternative also provides protection against water quality impairment equivalent to the prescriptive standard as required in Title 27 Section 20080(b)(2).

The engineered alternative proposed by the Discharger for the cover system for WMUs II, III and IV consists of, in ascending order:

- A 2-ft thick compacted foundation layer;
- A low permeability layer consisting of 60-mil linear low density polyethylene (LLDPE);
- A double-sided geocomposite drainage layer on top of the LLDPE where slopes are steeper than 10 percent; and
- 1.5-feet thick soil layer, which is capable of supporting vegetation.

**Monitoring and Reporting Program:** This Order requires that significant data be gathered regarding the groundwater, landfill gas and the treatment system performance. As with any other facility, the Discharger may request revisions to the Monitoring and Reporting Program (i.e. identify new wells, remove a monitored constituent, add a newly identified compound, etc...) upon its review of the existing data. Modifications to the Monitoring and Reporting

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Program can be requested at any time. Any changes to the MRP can be approved by the Regional Water Board's Executive Officer.

## **SUMMARY**

These WDRs incorporate the information collected by the Discharger in an effort to comply with Cease and Desist Order No. R5-2005-0073, the 23 December 2005 Stipulated Judgment, and Cleanup and Abatement Order No. R5-2006-0721. The intent of these enforcement Orders is to have the Discharger comply with CCR Title 27. These requirements address the remaining issues at the landfill and if complied with will bring this facility into compliance with the current regulations.

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